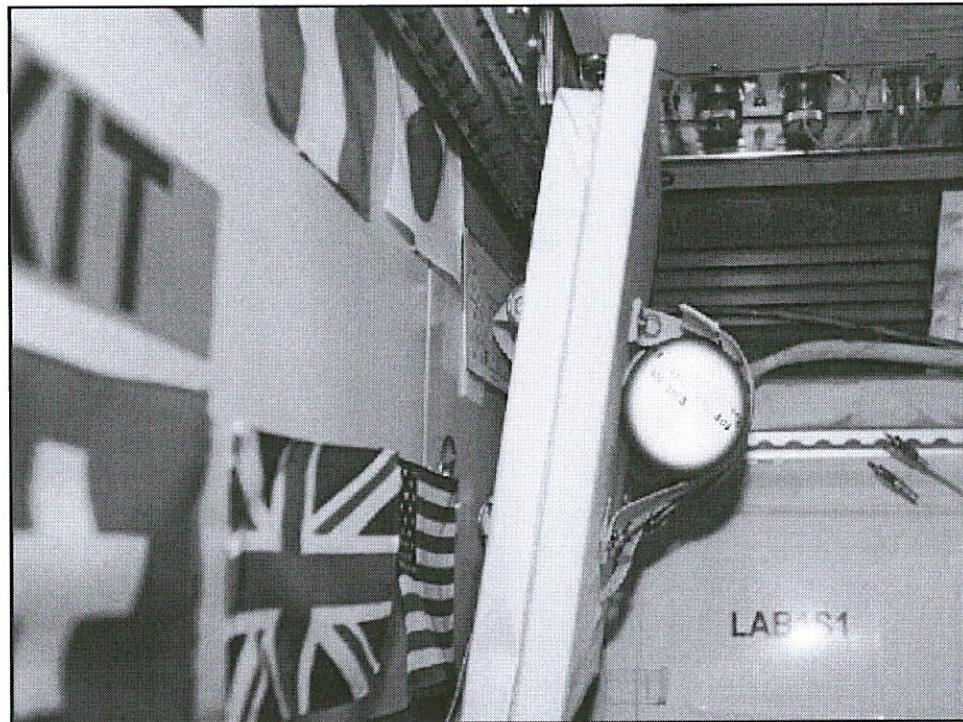


# Overview and Results of ISS Space Medicine Operations Team (SMOT) Activities

H. M. Johnson  
A. E. Sargsyan, M.D.  
C. Armstrong  
P. V. McDonald PhD  
J. M. Duncan, M.D.  
V.V. Bogomolov, M.D., Ph. D



## Educational Objectives

- The audience will receive an in-depth overview of the multilateral operational management of medically relevant issues that occur in the course of long-duration ISS missions.
  - Familiarization with the ISS international Space Medicine Operations Team (SMOT)
  - Understanding of SMOT scope and function based on the analysis of SMOT records
  - Understanding of the SMOT's role in the ISS mission medical status and mission medical readiness review process

Is this word necessary?

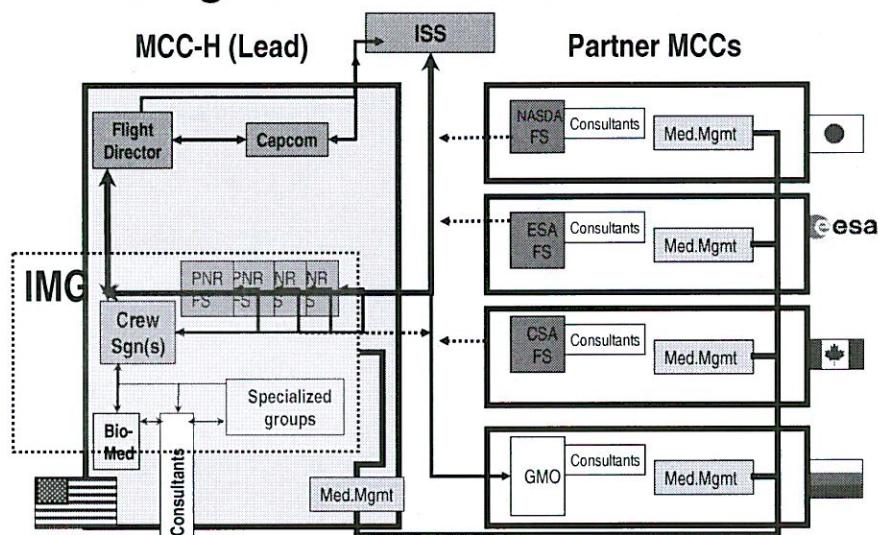
## SMOT Purpose

- ISS Medical Operations integration
- Equal awareness of all Partners
- Emergency response capability / management
- Operational input from all Partners for medically relevant concerns
- Source of medical input to the ISS Mission Management

## Nominal SMOT

- A weekly international forum for unrestricted exchange of information among medical personnel on:
  - ISS crew health
  - Results of medical monitoring - objective data obtained by the ISS Integrated Medical Group (IMG)
  - Environmental monitoring data including Radiation
  - Status of the ISS Integrated Medical System (IMS) subsystems and components
  - Medically relevant aspects of ISS operations
  - Any concerns related to crew health and safety, and operational medical support

## Integration of All Partners



# SMOT Participation

MEETING#324

ISS-14

MISSION MEDICAL SUPPORT STATUS

March 1, 2007 (Thursday)

(07:00 AM Central Time, 08:00 AM Eastern Time, 16:00 Moscow Time)

Expected participants:

JSC/ NASA	M. Duncan (Chair), T. Taddeo, J.D. Polk, D. Alexander (ISS-14 Crew Surgeon), G. Chamberlain (ISS-14 Deputy Crew Surgeon), S. Hart, V. Pukarev (IBMP), Y. Kobzev (GCTC/FSA), W. Sipes, A. Sargsyan, K. Parker, K. Mathes
IBMP/ FSA	V. Bogomolov
GCTC/FSA	V. Pochuev, V. Matveev
MCC-M/ FSA	I. Alferova, E. Khorosheva
ESA	F. Castrucci, J. Straube, R. Kuyumjian, J. Phelan (at JSC)
CSA	J.M. Comeau, G. Gray
JAXA	K. Shimada (at JSC)

Official Interpreter At JSC

# SMOT Agenda

- Permanent Agenda Items:
  - 1. Results of in-flight medical evaluations
  - 2. ISS environmental parameters
    - Including radiation environment and accumulated radiation doses
  - 3. State of exercise hardware
  - 4. IMG reports
    - A. Crew health
    - B. Any new concerns
  - 5. Once per month - Look-Ahead Readiness Review of upcoming medical activities and ISS events. The SMOT members also become aware of schedules and potential issues the medical community might be facing. There is also a retrospective component of the Look-Ahead RR.

## SMOT Agenda – Sample

#	Item	Presenter	Duration
1	Greetings, introductions	Duncan / Bogomolov	5 min
2	ISS-14 Joint Medical Operation Report, crew health-related updates and issues - IMG at MCC-H	Alexander (ISS-14 CS), Chamberlain (ISS-14 DCS), Kobzev (Russian FS), Hart (NASA FS)	10 min
3	ISS-14 Joint Medical Operational Report – IMG at MCC-M	Alferova (GMO)	5 min
4	Poll for Continuation of the Mission	Duncan	5 min
5	Recent / Current Operational Issues and Updates	As appropriate	10 min
6	Closing comments and adjourn Future meetings: Thursday, March 8 (nominal time) Thursday, March 15 (nominal time)	Bogomolov / Duncan	5 min

## SMOT Contents - Actual

#	Item	Presenter	Duration
1	Greetings, introductions	Duncan / Bogomolov	5 min
2	ISS-14 Joint Medical Operation Report, crew health-related updates and issues - IMG at MCC-H	Alexander (ISS-14 CS), Chamberlain (ISS-14 DCS), Kobzev (Russian FS), Hart (NASA FS)	10 min
3	ISS-14 Joint Medical Operational Report – IMG at MCC-M	Alferova (GMO)	5 min
4	Poll for Continuation of the Mission	Duncan	5 min
5	Recent / Current Operational Issues and Updates	As appropriate	10 min
6	Closing comments and adjourn Future meetings: Thursday, March 8 (nominal time) Thursday, March 15 (nominal time)	Bogomolov / Duncan	5 min

These  
 are the  
 same ???  
 Will the  
 bottom one  
 be replaced  
 with an  
 actual text  
 example of  
 the minutes?

## SMOT Products

- Summary from each weekly meeting
- Input for the ISS Integrated Mission Management Team (IMMT) as necessary
- For serious concerns, other products, statements, or recommendations as appropriate

## SMOT Statistics

- 332 meetings by teleconference
- Configuration
- Average interval between teleconferences; average duration
- Average number of attendees
- Number of ~~ImedS~~ concerns discussed
- Number of Environmental concerns discussed
- Number of countermeasures aspects discussed

## SMOT in Off-nominal Situations

- ISS medical concerns
- ISS environmental concerns
- ISS medical capability concerns
- STS-107 accident
- Hurricanes (Texas Gulf Coast)

## Place in the ISS Mission Medical Readiness Review Process

- Once per month – “Look-Ahead” Readiness Review of upcoming medical activities and important ISS events.
- Proactive approach to IMS maintenance
- Proactive approach to foreseeable health-related problems

## To Recapitulate

- SMOT is a weekly private teleconference but can be called at any time if necessary
- Crew health and well-being status / issues are discussed in unrestricted (open) fashion
- Status / problems are stated for hardware, procedural matters, environmental status, crew work/rest schedule, data transfer, and any other issues
- SMOT includes medical management of all ISS partners
- SMOT generates operational medical input for the ISS Program (ISS Mission Management Team (MMT))